

REMARKS

The Office Action dated September 3, 2008 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 1-6 and 8-36 are currently pending in the application and are respectfully submitted for consideration.

Claim Rejections Under 35 U.S.C. § 103(a)

The Office Action rejected claims 1-6 and 8-36 under 35 U.S.C. § 103(a) as being allegedly unpatentable over “3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; IP Multimedia Services (IMS); Stage 2 (Release 5)” 3GPP TS 23.228 V6.0.0, January 2003 (“3GPP”), in view of U.S. Publication No. 2002/0194336 (“Kett”). The Office Action took the position that 3GPP discloses all the elements of the claims with the exception of “connecting from an application server to a registration server via a direct interface.” The Office Action then cited Kett as allegedly curing the deficiencies of 3GPP. (See Office Action at page 4). The rejection is respectfully traversed for at least the following reasons.

Claim 1, upon which claims 2-6 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of a service account, and forwarding a request for de-registration from the application server via a direct interface to a registration server, which maintains

a registration status of the subscriber, upon determining that disruption or termination of service is required. The method further includes changing the registration status of the subscriber so as to de-register the subscriber at the registration server in response to the de-registration request.

Claim 8, upon which claims 9-10 are dependent, recites a system for deactivating a service account of a registered subscriber within a signaling network supporting internet protocol based services. The system includes a registration server configured to maintain a registration status of the subscriber. The system further includes an application server, to which the service account is associated, configured to monitor a status of the service account and to forward via a direct interface a request for de-registration to the registration server, upon determining that disruption or termination of service is required. The registration server is configured to change the registration status of the subscriber so as to de-register the subscriber in response to the de-registration request.

Claim 11, upon which claims 12-14 and 18-19 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of the service account, and forwarding a request for barring from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The method further includes changing a barring

indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 15 recites a system for deactivating a service account of a registered subscriber within a signaling network supporting internet protocol based services. The system includes a registration server configured to maintain a registration status of the subscriber. The system further includes an application server, to which the service account is associated, configured to monitor a status of the service account and to forward via a direct interface a request for barring to the registration server, upon determining that disruption or termination of service is required. The registration server is configured to change a barring indication of the subscriber to bar the subscriber in response to the barring request.

Claim 16 recites a system for deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The system includes monitoring means for monitoring a status of the service account, and forwarding means for forwarding a request for de-registration from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The system further includes changing means for changing the registration status of the subscriber so as to deregister the subscriber at the registration server in response to de-registration request.

Claim 17 recites a system for deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The system includes monitoring means for monitoring a status of the service account, and forwarding means for forwarding a request for barring from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The system further includes changing means for changing a barring indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 20, upon which claims 21-24 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of a service account, and forwarding a request for de-registration from the application server via a direct interface to a registration server upon determining that disruption or termination of service is required. The registration server maintains a registration status of the subscriber. The registration server changes the registration status of the subscriber so as to de-register the subscriber at the registration server in response to the de-registration request.

Claim 25, upon which claim 26 is dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes

receiving from the application server via a direct interface a request for de-registration at a registration server, which maintains a registration status of the subscriber. The method further includes changing the registration status of the subscriber so as to de-register the subscriber at the registration server in response to the de-registration request.

Claim 27, upon which claims 28-29 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of the service account, and forwarding a request for barring from the application server via a direct interface to a registration server upon determining that disruption or termination of service is required. The registration server maintains a registration status of the subscriber. The registration server changes a barring indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 30, upon which claim 31 is dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes receiving from the application server via a direct interface a request for barring to a registration server, which maintains a registration status of the subscriber. The method further includes changing a barring indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 32, upon which claim 33 is dependent, recites a registration server for deactivating a service account of a registered subscriber. The registration server includes a storage configured to maintain a registration status of the subscriber. The registration server further includes an updating unit configured to change the registration status of the subscriber so as to de-register the subscriber in response to a de-registration request forwarded from an application server via a direct interface to the registration server.

Claim 34 recites a registration server for deactivating a service account of a registered subscriber. The registration server includes means for maintaining a registration status of the subscriber. The registration server further includes means for changing the registration status of the subscriber so as to de-register the subscriber in response to a de-registration request forwarded from an application server via a direct interface to the registration server.

Claim 35 recites an application server for deactivating a service account of a registered subscriber. The application server includes a forwarding unit configured to forward a request for de-registration from the application server via a direct interface to a registration server, upon determining that disruption or termination of service is required.

Claim 36 recites an application server for deactivating a service account of a registered subscriber. The application server includes means for monitoring a status of the service account. The application server further includes means for forwarding a request for de-registration from the application server via a direct interface to a registration server, upon determining that disruption or termination of service is required.

As will be discussed below, the combination of 3GPP and Kett fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

3GPP generally discloses a stage-2 service description for a Internet Protocol (IP) Multimedia Core Network Subsystem (IMS), including the elements necessary to support IP Multimedia (IM) services in UMTS. ITU-T Recommendation I.130 describes a three-stage method for characterization of telecommunication services, and ITU-T Recommendation Q.65 defines stage 2 of the method. 3GPP identifies the mechanisms to enable support for IP multimedia applications. (See 3GPP at “Scope”).

Kett generally discloses a registration server implementing an application programming interface (API) which authenticates services and provides discover of network resources, prior to registering services with selected network resources. Specifically, with respect to Figure 4, Kett discloses the interfaces between components of the network implementing the Parlay interface. The interface is object-oriented and is implemented using service interfaces and framework interfaces. The service interfaces of application provide access to the capabilities of the network. The framework interfaces provide a surround for the service interfaces and implements processes of authentication, discovery, and registration. There is a direct interface 4.2 between client applications and Parlay services. The direct interface is only accessed after an application has signed-on via the framework interface 4.1. (See Kett at Abstract and paragraph 0030).

Applicants respectfully submit that 3GPP and Kett, whether considered individually or in combination, fail to disclose, teach, or suggest, all of the elements of the present claims. For example, the combination of 3GPP and Kett fails to disclose, teach, or suggest, at least, *“forwarding a request for de-registration from said application server via a direct interface,”* as recited in independent claim 1, and similarly recited in independent claims 8, 20, 32, and 34-36; *“forwarding a request for barring from said application server via a direct interface to a registration server,”* as recited in independent claim 11, and similarly recited in independent claims 16, 17, and 27; *“receiving from said application server via a direct interface a request for de-registration at a registration server,”* as recited in independent claim 25; and *“receiving from said application server via a direct interface a request for barring to a registration server,”* as recited in independent claim 30.

The Office Action correctly concludes that 3GPP does not disclose, or suggest, the aforementioned elements of the independent claims. (See Office Action at page 4). Furthermore, Kett does not cure the deficiencies of 3GPP. Applicants respectfully submit that the portion of Kett cited by the Office Action does not teach a direct interface between an application server and a registration server. Instead, as discussed above, the cited portion of Kett discloses an interface between client applications and Parlay services, direct interface 4.2. Kett further discloses that the interface is normally accessed after an application has signed-on via the framework interface 4.1, which provides a surround for the service interface. (See Kett at paragraph 0030). The

framework FW resides on the registration server 5, while the client applications and client FW run on the service provider platforms 4a, 4b. (See Kett at paragraph 0031). Thus, Kett also fails to disclose, or suggest, the aforementioned elements of the independent claims.

Furthermore, Applicants respectfully submits that Kett substantially differs from the claimed invention. For example, Kett teaches a registration procedure, rather than a de-registration procedure, and Kett also teaches an API implementation. Thus, there is no motivation or suggestion in 3GPP which would allow a person of ordinary skill in the art to use the teaching of a registration procedure based on an API implementation, such as disclosed in Kett, in order to provide the de-registration or barring procedure of the claimed invention. Likewise, there is no motivation or suggestion in Kett which would allow a person of ordinary skill in the art to use the teaching of a de-registration procedure without API implementation, such as disclosed in 3GPP, in order to provide the de-registration or barring procedure of the claimed invention.

Therefore, for at least the reasons discussed above, the combination of 3GPP and Kett fails to disclose, teach, or suggest, all of the elements of independent claims 1, 8, 11, 15-17, 20, 25, 27, 30, 32, and 34-36. For the reasons stated above, Applicants respectfully request that this rejection be withdrawn.

Claims 2-6 depend upon independent claim 1. Claims 9-10 depend upon independent claim 8. Claims 12-14 and 18-19 depend upon independent claim 11. Claims 21-24 depend upon independent claim 20. Claim 26 depends upon independent

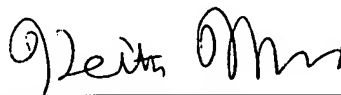
claim 25. Claims 28-29 depend upon independent claim 27. Claim 31 depends upon independent claim 31. Claim 33 depends upon independent claim 32. Thus, Applicants respectfully submit that claims 2-6, 9-10, 12-14, 18-19, 21-24, 26, 28-29, 31, and 33 should be allowed for at least their dependence upon independent claims 1, 8, 11, 20, 25, 27, 30, and 32, and for the specific elements recited therein.

For at least the reasons discussed above, Applicants respectfully submit that the cited prior art references fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-6 and 8-36 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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